EPA REGION 8 QA DOCUMENT REVIEW CROSSWALK

QAPP/FSP/SAP for: *(check appropriate box)* [ ] **GRANTEE** [x] **CONTRACTOR** [ ] **EPA** [ ] **Other**	**Entity** *(grantee, contract, EPA AO, EPA Program, Other)* TechLaw Inc. as the ESAT contractor to USEPA	**Regulatory Authority** **and/or** **Funding Mechanism**	___**40 CFR 31 for Grants** _x_**48 CFR Part 46 for Contracts** ___ **Interagency Agreement** ___ **EPA Administrative Order** ___ **EPA Program Funding** ___ **EPA Program Regulation** ___ **EPA CIO 2105**
Document Title *[Note: Title will be repeated in Header]*	Upper Animas Mining District SAP/QAPP 2015 Sampling Events		
QAPP/FSP/SAP Preparer	Steve Auer		303-312-7717
Period of Performance *(of QAPP/FSP/SAP)*	June 8, 2015 through December 31, 2015	**Date Submitted for Review**	6/1/2015
EPA Project Officer **EPA Project Manager**	Nicole Plescia Paula Schmittdiel	**PO Phone #** **PM Phone #**	303-312-6547 303-312-6861
QA Program Reviewer or Approving Official	Dan Wall	**Date of Review**	

Documents to Review:

1. QAPP written by Grantee or EPA must also include for review:
   Work Plan(WP) / Statement of Work (SOW) / Program Plan (PP) / Research Proposal (RP)

2. QAPP written by Contractor must also include for review:
   a) Copy of signed QARF for Task Order
   b) Copy of Task Order SOW
   c) Made available hard or electronic copy of approved QMP
   d) If QMP not approved, provide Contract SOW

3. For a Field Sampling Plan (FSP) or Sampling & Analyses Plan (SAP), the Project QAPP must also be provided.
   OR
   The FSP or SAP must be clearly identified as a stand-alone QA document and must contain all QAPP required elements (Project Management, Data Generation/Acquisition, Assessment and Oversight, and Data Validation and Usability).

Documents Submitted for QAPP Review:

1. QA Document(s) submitted for review:

QA Document	Document Date	Document Stand-alone	Document with QAPP
QAPP	**5/5/15**	Combined as SAP	
FSP		Yes / No	Yes / No
SAP	**5/5/15**	Combined as SAP/QAPP	Combined as SAP/QAPP
SOP(s)			Yes / No

2. WP/SOW/TO/PP/RP Date ___**2013**_____
WP/SOW/TO/RP Performance Period _**8/31/2020**____

3. QA document consistent with the:
WP/SOW/PP for grants? __Yes / No__
SOW/TO for contracts? __Yes__

4. QARF signed by R8 QAM Yes
Funding Mechanism __contract__
Amount ____**$360,000**____

Summary of Comments *(highlight significant concerns/issues)***:**

1. Comment #1
2. Comment #2
3. Comment #3
4. **The** TechLaw Inc. as the ESAT contractor to USEPA **must address the comments in the Summary of Comments, as well as those identified in the**

Element	Acceptable *Yes/No/NA*	Page/ Section	Comments
Comment section(s) that includes a "Response (date)" and Resolved (date)".			
A. Project Management			
A1. Title and Approval Sheet			
a. Contains project title		Cover Page	
b. Date and revision number line (for when needed)		Cover Page	
c. Indicates organization=s name		Cover Page	
d. Date and signature line for organization=s project manager		i	
e. Date and signature line for organization=s QA manager		i	
f. Other date and signatures lines, as needed		i	
A2. Table of Contents			
a. Lists QA Project Plan information sections		iii	
b. Document control information indicated		Cover Page	
A3. Distribution List			
Includes all individuals who are to receive a copy of the QA Project Plan and identifies their organization		viii	
A4. Project/Task Organization			
a. Identifies key individuals involved in all major aspects of the project, including contractors		ix	
b. Discusses their responsibilities		ix	
c. Project QA Manager position indicates independence from unit generating data		ix	
d. Identifies individual responsible for maintaining the official, approved QA Project Plan		ix	
e. Organizational chart shows lines of authority and reporting responsibilities		x	
A5. Problem Definition/Background			
a. States decision(s) to be made, actions to be taken, or outcomes expected from the information to be obtained		1	

b. Clearly explains the reason (site background or historical context) for initiating this project		2-4	
c. Identifies regulatory information, applicable criteria, action limits, etc. necessary to the project		2-4	
A6. Project/Task Description			
a. Summarizes work to be performed, for example, measurements to be made, data files to be obtained, etc., that support the project=s goals		4-5	
b. Provides work schedule indicating critical project points, e.g., start and completion dates for activities such as sampling, analysis, data or file reviews, and assessments		4	
c. Details geographical locations to be studied, including maps where possible		4	
d. Discusses resource and time constraints, if applicable		4	
A7. Quality Objectives and Criteria			
a. Identifies - performance/measurement criteria for all information to be collected and acceptance criteria for information obtained from previous studies, - including project action limits and laboratory detection limits and - range of anticipated concentrations of each parameter of interest		5-12	
b. Discusses precision		13-14	
c. Addresses bias		14	
d. Discusses representativeness		13-14	
e. Identifies the need for completeness		13-14	
f. Describes the need for comparability		13-14	
g. Discusses desired method sensitivity		13-14	
A8. Special Training/Certifications			
a. Identifies any project personnel specialized training or certifications		14-15	
b. Discusses how this training will be provided		14-15	
c. Indicates personnel responsible for assuring training/certifications are satisfied		14-15	
d. identifies where this information is documented		14-15	

A9. Documentation and Records			
a. Identifies report format and summarizes all data report package information		15	
b. Lists all other project documents, records, and electronic files that will be produced		15	
c. Identifies where project information should be kept and for how long		15	
d. Discusses back up plans for records stored electronically		15	
e. States how individuals identified in A3 will receive the most current copy of the approved QA Project Plan, identifying the individual responsible for this		15	
B. Data Generation/Acquisition			
B1. Sampling Process Design (Experimental Design)			
a. Describes and justifies design strategy, indicating size of the area, volume, or time period to be represented by a sample		16-18	
b. Details the type and total number of sample types/matrix or test runs/trials expected and needed		16-18	
c. Indicates where samples should be taken, how sites will be identified/located		16-18	
d. Discusses what to do if sampling sites become inaccessible		16	
e. Identifies project activity schedules such as each sampling event, times samples should be sent to the laboratory, etc.		16-18	
f. Specifies what information is critical and what is for informational purposes only		18	
g. Identifies sources of variability and how this variability should be reconciled with project information		18	
B2. Sampling Methods			
a. Identifies all sampling SOPs by number, date, and regulatory citation, indicating sampling options or modifications to be taken		19-20	
b. Indicates how each sample/matrix type should be collected		19-20	

c. If in situ monitoring, indicates how instruments should be deployed and operated to avoid contamination and ensure maintenance of proper data		19	
d. If continuous monitoring, indicates averaging time and how instruments should store and maintain raw data, or data averages		N/A	
e. Indicates how samples are to be homogenized, composited, split, or filtered, if needed		19-20	
f. Indicates what sample containers and sample volumes should be used		19-20	
g. Identifies whether samples should be preserved and indicates methods that should be followed		22-23	
h. Indicates whether sampling equipment and samplers should be cleaned and/or decontaminated, identifying how this should be done and by-products disposed of		19-20	
i. Identifies any equipment and support facilities needed		19	
j. Addresses actions to be taken when problems occur, identifying individual(s) responsible for corrective action and how this should be documented		16	
B3. Sample Handling and Custody			
a. States maximum holding times allowed from sample collection to extraction and/or analysis for each sample type and, for in-situ or continuous monitoring, the maximum time before retrieval of information		22-23	
b. Identifies how samples or information should be physically handled, transported, and then received and held in the laboratory or office (including temperature upon receipt)		22-23	
c. Indicates how sample or information handling and custody information should be documented, such as in field notebooks and forms, identifying individual responsible		22	
d. Discusses system for identifying samples, for example, numbering system, sample tags and labels, and attaches forms to the plan		21-22	
e. Identifies chain-of-custody procedures and includes form to track custody		22	
B4. Analytical Methods			

a. Identifies all analytical SOPs (field, laboratory and/or office) that should be followed by number, date, and regulatory citation, indicating options or modifications to be taken, such as sub-sampling and extraction procedures		23	
b. Identifies equipment or instrumentation needed		23-24	
c. Specifies any specific method performance criteria		23	
d. Identifies procedures to follow when failures occur, identifying individual responsible for corrective action and appropriate documentation		24	
e. Identifies sample disposal procedures		23	
f. Specifies laboratory turnaround times needed		23-24	
g. Provides method validation information and SOPs for nonstandard methods		23-24	
B5. Quality Control			
a. For each type of sampling, analysis, or measurement technique, identifies QC activities which should be used, for example, blanks, spikes, duplicates, etc., and at what frequency		25	
b. Details what should be done when control limits are exceeded, and how effectiveness of control actions will be determined and documented		25	
c. Identifies procedures and formulas for calculating applicable QC statistics, for example, for precision, bias, outliers and missing data		25	
B6. Instrument/Equipment Testing, Inspection, and Maintenance			
a. Identifies field and laboratory equipment needing periodic maintenance, and the schedule for this		25	
b. Identifies testing criteria		25	
c. Notes availability and location of spare parts		25	
d. Indicates procedures in place for inspecting equipment before usage		26	
e. Identifies individual(s) responsible for testing, inspection and maintenance		26	
f. Indicates how deficiencies found should be resolved, re-inspections performed, and effectiveness of corrective action determined and documented		26	

B7. Instrument/Equipment Calibration and Frequency			
a. Identifies equipment, tools, and instruments that should be calibrated and the frequency for this calibration		26	
b. Describes how calibrations should be performed and documented, indicating test criteria and standards or certified equipment		26	
c. Identifies how deficiencies should be resolved and documented		26	
B8. Inspection/Acceptance for Supplies and Consumables			
a. Identifies critical supplies and consumables for field and laboratory, noting supply source, acceptance criteria, and procedures for tracking, storing and retrieving these materials		26	
b. Identifies the individual(s) responsible for this		26	
B9. Use of Existing Data (Non-direct Measurements)			
a. Identifies data sources, for example, computer databases or literature files, or models that should be accessed and used		26	
b. Describes the intended use of this information and the rationale for their selection, i.e., its relevance to project		26	
c. Indicates the acceptance criteria for these data sources and/or models		26	
d. Identifies key resources/support facilities needed		26	
e. Describes how limits to validity and operating conditions should be determined, for example, internal checks of the program and Beta testing		26	
B10. Data Management			
a. Describes data management scheme from field to final use and storage		27-28	
b. Discusses standard record-keeping and tracking practices, and the document control system or cites other written documentation such as SOPs		27-28	
c. Identifies data handling equipment/procedures that should be used to process, compile, analyze, and transmit data reliably and accurately		27-28	
d. Identifies individual(s) responsible for this		27-28	
e. Describes the process for data archival and retrieval		27-28	

f. Describes procedures to demonstrate acceptability of hardware and software configurations		27-28	
g. Attaches checklists and forms that should be used		27-28	
C. Assessment and Oversight			
C1. Assessments and Response Actions			
a. Lists the number, frequency, and type of assessment activities that should be conducted, with the approximate dates		29-30	
b. Identifies individual(s) responsible for conducting assessments, indicating their authority to issue stop work orders, and any other possible participants in the assessment process		29	
c. Describes how and to whom assessment information should be reported		29-30	
d. Identifies how corrective actions should be addressed and by whom, and how they should be verified and documented		29-30	
C2. Reports to Management			
a. Identifies what project QA status reports are needed and how frequently		30	
b. Identifies who should write these reports and who should receive this information		30	
D. Data Validation and Usability			
D1. Data Review, Verification, and Validation			
Describes criteria that should be used for accepting, rejecting, or qualifying project data		31	
D2. Verification and Validation Methods			
a. Describes process for data verification and validation, providing SOPs and indicating what data validation software should be used, if any		32	
b. Identifies who is responsible for verifying and validating different components of the project data/information, for example, chain-of-custody forms, receipt logs, calibration information, etc.		32	
c. Identifies issue resolution process, and method and individual responsible for conveying these results to data users		32	

d. Attaches checklists, forms, and calculations		Tables	
D3. Reconciliation with User Requirements			
a. Describes procedures to evaluate the uncertainty of the validated data		32	
b. Describes how limitations on data use should be reported to the data users		32	